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A SMALL COLLECTION OF HETEROPTERA FROM THE GALAPAGOS ISLANDS, WITH THE DESCRIPTION OF THE NEW SPECIES *NIESTHREA ASHLOCKI* AND A LIST OF *NIESTHREA* SPECIES (RHOPALIDAE)

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Abstract.—Report on seven species of Heteroptera from the Galapagos Islands: Five confirm reported occurrences on Santa Cruz Island; one new island record of *Harmostes disjunctus* Barber from Fernandina Island; and description of one new species, *Niesthrea ashlocki* taken from *Sida acuta* Burmann [Malvaceae] on Santa Cruz Island, most closely allied to the Brazilian *N. digna* Chopra. Description of the new species accompanied by dorsal habitus drawing and sketch of male genital capsule. Included is a checklist of the species of *Niesthrea* Spinola.

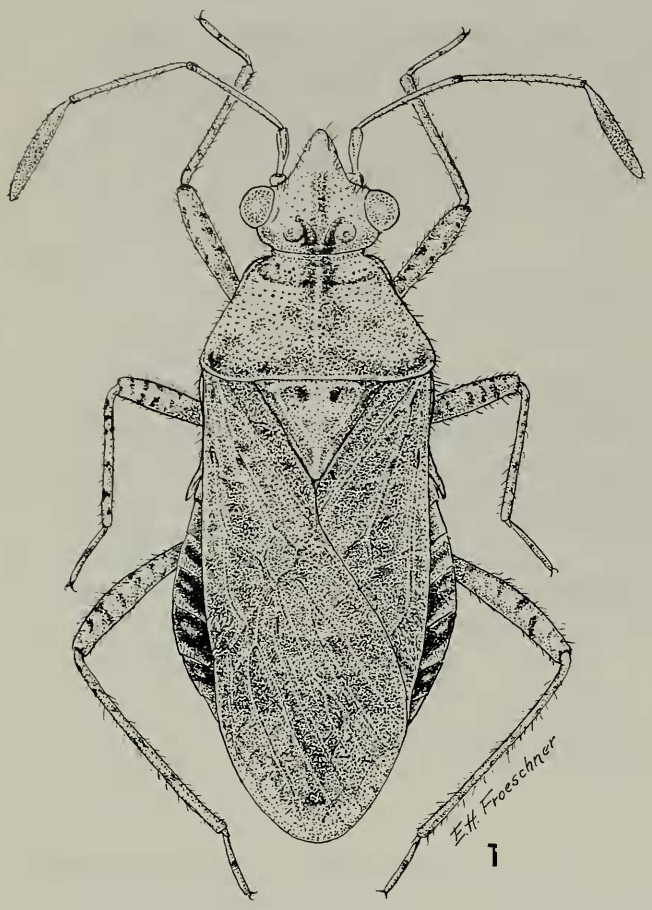
Subsequent to the appearance of my synopsis of the Heteroptera of the Galapagos Islands (1985) Dr. Peter D. Ashlock (University of Kansas, Lawrence) submitted for my study a small collection of Heteroptera he made on the Galapagos Islands during the period of January to May of 1964. All specimens but one were from Santa Cruz Island and included the following: Berytidae: *Metacanthus galapagoensis* (Barber) [in abandoned garden]; Coreidae: *Anasa obscura* Dallas [from "*Mamortlca*" (probably a misspelling for the Cucurbitaceae genus *Momordica*) *indica*; in abandoned garden]; Miridae: *Horcias lacteiclavus* Distant [part of the population discussed by Carvalho (1968:200); Pentatomidae: *Acrosternum viridans* (Stal) [at light; in abandoned garden]; *Podisus sordidus* (Stal) [from *Psidium* sp.]; Rhopalidae: *Harmostes disjunctus* Barber, including nymphs; *Niesthrea ashlocki*, new species described below [from *Sida acuta* Burmann]. One new island record was included based on a broken specimen of *Harmostes disjunctus* taken in the Miconia Belt at 1300–2100′ on the SW side of Fernandina Island, 4 Feb 1964, P. D. Ashlock.

The New World genus *Niesthrea* Spinola (1837:245), in the tribe Niesthrini, was not previously reported for the Galapagos Islands. In my (1985) synopsis it would key to *Liorhyssus* in couplet 2 on page 49. *Niesthrea*'s pronotum lacks the subapical, calloused, impunctate, transverse ridge that is characteristic of *Liorhyssus*. Chopra (1973) presented a revision of the genus *Niesthrea* based principally on male genitalic characters.

Niesthrea ashlocki, new species
Figs. 1–2

Diagnosis.—Males are easily recognized to species by the shape of the medioventral lobe on the genital capsule plus the length of the claspers (Fig. 2): Medioventral lobe broad, lateral expansion subangularly convex; exposed part of clasper gently curved, apically more strongly incurved to a subacute tip, exposed part of clasper elongate, extending by half its length beyond apex of medioventral lobe.

Description (measurements in millimeters).—Holotype male, length 5.35; general



Figs. 1–2. *Niesthrea ashlocki*, new species: 1, dorsal view; natural length 5.3 mm; 2, male genital capsule, ventral view, left clasper omitted.

color yellowish; head clouded with fuscous on midline between eyes, with a pair of diverging, deep-black lines between ocelli. Antenna yellow, segment I mesally and laterally with an oblique, fuscous line; segments II and III with a blackened line extending almost full length, II blackened apically. Pronotum with median fuscous area divided by pale median carina; posterior lobe with humeri, subbasal margin, and diagonal row of a few fuscous spots. Scutellum with subbasal pair of brown spots. Hemelytral veins with a few reddish-brown dots. Dorsal disc of abdomen (viewed through hyaline hemelytra) mostly black; connexival segments apically pale, visible segments III–V basally broadly black, each with an included pale dot, the black extending onto margin of venter. Legs yellow, appearing annulate due to transverse dark marking extending more or less around femur and tibia.

Head.—Length 0.90, width across eyes 1.15; preocular part convex, tylus distinctly produced anteriorly; antennal tubercles short, apex transverse. Antennal, segment lengths I–IV, 0.36:0.87:0.87:0.95, segment I reaching apex of tylus. Labium reaching basal segment of abdomen, lengths of segments I–IV, 0.53:0.71:0.53:0.76, segment I reaching hind margin of eye.

Pronotum, length 0.90, width 1.77.

Genital capsule (Fig. 2) with medioventral lobe broader than long, constricted basally, apical margin subangularly concave, laterally subangularly convex; dorsolateral lobe (best viewed from above) distinctly incurved, markedly surpassing apex of medioventral lobe. Exposed part of clasper gently curved, apex projecting mesally as an acute tip, inner margin near apex of capsule with a small tooth.

Female.—Length 5.58. General appearance similar to male but more abundantly dotted on pronotum; ventrally with red dots on thoracic pleurae. Last abdominal tergum rounded. Last abdominal sternum not notched. Head, length 1.15, width 1.23. Antennal segment lengths, I–IV 0.37:1.50:1.50:1.20. Labial segment lengths, I–IV, 0.57:0.76:0.62:0.82. Pronotum, length 1.25, width 2.06.

Holotype male.—"Galapagos, 4 mi. [6.4 km] N Academy Bay, Santa Cruz Is., 21 Feb 1965, P. D. Ashlock, *Sida acuta* Burm. [Malvaceae]." Paratype: one female, Galapagos Arch.[ipelago], Santa Cruz Is., 2.4 km N Academy Bay, 25 Feb 1964, P. D. Ashlock. Holotype and lone paratype in the National Museum of Natural History.

Placement of this new species in the phy-

logeny (based solely on males) proposed by Chopra (1973) in his revision of the genus *Niesthrea* may be made as follows. Three modifications of the male genital structures (Fig. 2) place it on the same branch of Chopra's (1973:457) "Phylogenetic tree" with *N. digna* Chopra: genital capsule with dorsolateral lobes incurved apically, medioventral lobe broader than long, and clasper apically incurved to form an acute angle. It differs from *N. digna* in having both the dorsolateral lobes and the clasper greatly surpassing the apex of the medioventral lobe, the claspers by almost half their own length and the dorsolateral lobe extending beyond them. The Galapagos Islands occurrence of *N. ashlocki* is geographically remote from the Brazilian homeland of *N. digna*.

The species name is a dedication to Dr. Peter D. Ashlock, the collector whose many contributions to heteropterology have soundly advanced that science.

Checklist of the Species of *Niesthrea* Spinola

The following list is an expanded version of that given on pages 52–56 of Göllner-Scheiding's (1983) catalog of the family Rhopalidae.

agnes Chopra, 1973:455	Argentina
ashlocki, new species	Galapagos Islands
brevicauda Chopra, 1973:455	Peru
dentata Chopra, 1973:454	Brazil
digna Chopra, 1973:453	Brazil
fenestrata (Signoret), 1859:93	Chile
flava Grillo & Alayo, 1978:43	Cuba
louisianica Sailer, 1961:297	U.S.A.; Mexico
parasidae Grillo & Alayo, 1978:46	Cuba
pictipes (Stal), 1859:239	Argentina; Brazil; Paraguay
subsp. *pictipes* (Stal), see species entry	
subsp. *casinii* Göllner-Scheiding, 1984:116	Argentina; Uruguay
sidae (Fabricius), 1794:169	Greater and Lesser Antilles; Colombia; Mexico; United States; Venezuela
similis Chopra, 1973:453	Argentina; Brazil
ventralis (Signoret), 1859:89	Guatemala; Mexico; United States
vincentii (Westwood), 1842:6 and 26	Greater and Lesser Antilles; Argentina; Brazil; Paraguay; Venezuela

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Literature Cited

Carvalho, J. C. M., & W. C. Gagne. 1986. Miridae of the Galapagos Islands (Heteroptera).—Proceedings of the California Academy of Sciences, Series 4 36(7):147–219.

Chopra, N. P. 1973. A revision of the genus *Niesthrea* Spinola (Rhopalidae: Hemiptera).—Journal of Natural History 7:441–459.

Fabricius, J. C. 1794. Ryngota. *In* Entomologia systematica emendata et aucta, secundum classes, ordines, genera, species, adjectus synonymis, locis, observationibus, descriptionibus 4:[I–IV], 1–229.

Froeschner, R. C. 1985. Synopsis of the Heteroptera or true bugs of the Galapagos Islands.—Smithsonian Contributions to Zoology 407:1–84.

Göllner-Scheiding, U. 1983. General-Katalog der Familie Rhopalidae (Heteroptera).—Mitteilungen aus dem Zoologischen Museum in Berlin 59:37–189.

———. 1984. Ergänzungen zu den Gattungen *Liorhyssus* Stal, 1870, *Niesthrea* Spinola, 1837, und *Rhopalus* Schilling, 1827 (Heteroptera, Rhopalidae).—Mitteilungen aus dem Zoologischen Museum in Berlin 60:115–121.

Grillo R., H. & P. Alayo. 1978. La Familia Rhopalidae (Heteroptera:Coreidae) en Cuba. Centro Agricola. Facultad de Ciencias Agricoles, Universidad Central de Las Villa, Septiembre-Diciembre 1978:41–64.

Sailer, R. I. 1961. The identity of *Lygaeus sidae* Fabricius, type species of the genus *Niesthrea* (Hemiptera: Coreidae).—Proceedings of the Entomological Society of Washington 63:293–299.

Signoret, V. 1859. Monographie du genre *Corizus*.—Annales de la Societe Entomologique de France. Series 3 7:75–105.

Spinola, M. 1837. Essai sur les genres d'insects appartenants a l'ordre des Hemipteres, Lin. ou Rhynchotes, Fab., et a la section des Heteropteres, Dufour. Geneva, Yves Graviers. 383 pp., 15 tabs.

Stal, C. 1859. Hemiptera: Species novas descripsit. Kongliga Svenska Fregattens Eugenies Resa Omkring Jorden, III (Zoologi, Insekter). Pp. 219–298, pls. 3–4.

Westwood, J. O. 1842. A catalogue of Hemiptera in the collection of the Rev. F. W. Hope, with short Latin descriptions of the new species. 2:1–26.

Note: The honoree of the new species, Dr. Peter D. Ashlock, died 26 January 1989.

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